

JUN 15 1998

Ref: 8P2-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Eugene M. Grant
Advanced Regulatory Specialist
Marathon Oil Company
1501 Stampede Avenue
Cody, WY 82414-4721

RE: UNDERGROUND INJECTION CONTROL (UIC)
Permit Modification - MIP
Tribal C #28 (WY2825-04382)
Steamboat Butte Field
Fremont County, Wyoming

Dear Mr. Grant:

Thank you for your letter of May 12, 1998, and permit modification requests for the above-cited Underground Injection Control (UIC) dual Phosphoria/Tensleep injector.

Your Step-Rate Test results, performed on April 22, 1998, by Halliburton Energy Services and attachments have been reviewed and found to satisfactorily justify your requested permit modifications.

With the receipt of these documents, your permit is hereby modified to reflect the **increased maximum injection pressure for the Tensleep Formation and decreased maximum injection pressure for the Phosphoria Formation**. Changes to the original permitted version are as follows:

PART II. C. 4 (b).

ORIGINAL VERSION:

4. Injection Pressure Limitation.

- (b) The exact pressure limit may be **increased or decreased** by the Director in order to ensure that the requirements in paragraph (a) are fulfilled. In order to determine an exact pressure limit, the permittee shall conduct a step-rate injection test or other authorized well test(s) that will serve to determine the fracture pressure of the

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VSA for DEH
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8P2-W
Tubing
6-15-98

injection zone. Test procedures shall be pre-approved by the Director. The Director shall specify in writing, to the permittee, any increase or decrease to the injection pressure based on the test results and/or other parameters reflecting actual injection operations. Until such time that this demonstration is made, the initial maximum injection pressure (Pm), measured at the surface, shall not exceed:

Dual Injector Completion (Ranchester not producing)

Phosphoria = 2180 psig. Tensleep = 1795 psig.

Dual Injection Completion with Ranchester Production

Pm = 1795 psig.

IS MODIFIED TO READ:

4. Injection Pressure Limitation.

- (b) The exact pressure limit may be **increased or decreased** by the Director in order to ensure that the requirements in paragraph (a) are fulfilled. In order to determine an exact pressure limit, the permittee shall conduct a step-rate injection test or other authorized well test(s) that will serve to determine the fracture pressure of the injection zone. Test procedures shall be pre-approved by the Director. The Director shall specify in writing, to the permittee, any increase or decrease to the injection pressure based on the test results and/or other parameters reflecting actual injection operations. Until such time that this demonstration is made, the initial maximum injection pressure, measured at the surface, shall not exceed:

Dual Injector Completion (Ranchester not producing)

Phosphoria = 1950 psig. Tensleep = 2150 psig.

Dual Injection Completion with Ranchester Production

Pm = 1950 psig.

All other provisions and conditions of the Final Permit, dated October 2, 1997, for the Steamboat Butte Field, shall remain as originally issued. If you have any questions on this action, contact Chuck Williams at (303) 312-6625.

Sincerely,

Kerrigan G. Clough
Assistant Regional Administrator
Office of Pollution Prevention,
State and Tribal Assistance

cc: Mr. Ken Wallowingbull, Chairman
Northern Arapahoe Tribe
Arapahoe Business Council

Mr. John Washakie, Chairman
Eastern Shoshone Tribe
Shoshone Business Council

Mr. Don Aragon, Director
Wind River Environmental Quality Commission

Mrs. Janie Nelson
State of Wyoming
Oil & Gas Conservation Commission

U.S. Department of the Interior
BIA - Wind River Agency

Mr. Stu Cerovski
BLM - Lander Resource Area

FCD: June 10, 1998: Chuck W.\Marathon\SB-C-#28.MIP